



National Weather Service

Storm Data and Unusual Weather Phenomena



March 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured		Estimated Damage Property Crops	Character of Storm
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CONNECTICUT, Northeast

CTZ002>004	Hartford - Tolland - Windham							
	08	1600EST			0	0		Heavy Rain
	09	2200EST						
CTZ002>004	Hartford - Tolland - Windham							
	09	0800EST			0	0		Strong Winds
		2200EST						
Hartford County								
West Hartford to Southington	09	1300EST			0	0		Flood
	10	1300EST						
Windham County								
Warrenville	09	1600EST			0	0		Flood
CTZ002								
Hartford								
	11	1300EST			0	0		Flood
	12	2300EST						

A powerful storm system moving slowly northeast from the Ohio Valley to the eastern Great Lakes brought strong winds and heavy rainfall to Connecticut, which resulted in urban street flooding, basement flooding, small stream flooding, and main stem river flooding. At times, the rainfall was torrential, especially in thunderstorms during the evening of March 9th.

Rainfall totals of 3 to 5 inches were reported across northern Connecticut. Some of the greatest totals included: Storrs, 4.86"; Willimantic, 4.50"; South Windsor, 4.00"; Glastonbury, 3.86"; Woodstock, 3.80"; Wethersfield, 3.77"; Newington and Scotland, 3.60"; and Southington, 3.56". A new record daily rainfall total for March 9th was established at Bradley International Airport, Windsor Locks, with 2.40".

Several small streams flooded. The Quinnipiac River at Southington reached flood stage of 3.5 feet at 1:00 PM on March 9th, crested at 5.0 feet at 9:45 PM and then fell below flood stage at 11:00 AM on March 10th. One unidentified stream reached flood stage at 1:20 PM on March 9th at West Hartford. Another unidentified stream reached flood stage in Newington at 1:25 PM on March 9th. In Windham County, at Warrenville, the Mount Hope River reached flood stage of 7 feet at 1:00 PM on March 9th, crested at 8.5 feet at 12:00 AM on March 10th, then fell below flood stage at 6:00 AM on March 10th.

The Connecticut River reached flood stage of 16 feet at Hartford at 1 PM on March 11th, crested at 16.9 feet at 10 AM on March 12th, then fell below flood stage at 11 PM on the 12th. The Farmington River at Simsbury crested at 11.7 feet at 9 PM on the 10th, just shy of flood stage, which is 12 feet.

Strong south winds occurred after the passage of a warm front during the mid to late morning hours. Winds gusted to 40 to 55 mph.

CTZ002	Hartford							
	18	1800EST			0	0		Heavy Rain
	19	1800EST						

More than 2 inches of rain fell in parts of Hartford County. A total of 2.15 inches fell at Hartford in about a 24-hour period.

CTZ002>003	Hartford - Tolland							
	21	2200EST			0	0		Heavy Snow
	22	0800EST						

A strong very early Spring nor'easter was caused by a low pressure system which moved to the north-northeast from the Virginia coast on March 21st, passing to the southeast of Cape Cod on March 22nd. This storm brought heavy snow to parts of northern Connecticut, which was mixed with periods of sleet. Snowfall totals of 6 to 9.5 inches were reported. The maximum total of 9.5 inches occurred at Stafford Springs, while some other amounts included: Windsor, 8.5 inches; Unionville and West Hartford, 6.5 inches; Newington, Avon, and Granby, 6.0 inches.

[illegible]

CONNECTICUT, Northeast

CTZ002	Hartford				
27	1543EST	0	0		Record Warmth

CTZ002	Hartford				
	28	1135EST	0	0	Record Warmth

On March 27th, the high temperature at Bradley International Airport in Windsor Locks soared to 82 degrees, breaking the old record for the date of 76 degrees set back in 1945. On March 28th, the warmest March day on record was recorded at Bradley International Airport in Windsor Locks...the mean temperature for the day was 70 degrees, breaking the old record of 69 degrees on March 30, 1977. The high temperature for the day of 84 degrees broke the old record of 83 degrees set in 1989 and prior years.

CTZ002	Hartford				
	30	1000EST	0	0	Flood
	31	2359EST			

Record warm temperatures produced a rapid snow melt across northern New England and the combined effects of rapid runoff and dam releases caused the Connecticut River to rise above flood stage of 16 feet at 10 AM, March 30th at Hartford. The river remained above flood stage into April...please see April Storm Data for further information. Flood-prone land outside of levee protection was affected.

CTZ002	Hartford				
31	1330EST	0	0		Record Warmth

At 1:30 PM, the temperature at Bradley International Airport, Windsor Locks, reached 89 degrees. This set a new all-time high temperature record for the month of March. The previous record was 87 degrees set on March 30, 1977. The high temperature of 89 also shattered the record high for the date of 71 degrees, set on March 31, 1986. Also, at many weather stations, the high temperatures on March 31st were the highest readings ever observed so early in the season.

MASSACHUSETTS, Central and East

MAZ002>023 Western Franklin - Eastern Franklin - Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Western Hampshire - Western Hampden - Eastern Hampshire - Eastern Hampden - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes

08	1700EST	0	0	Heavy Rain
09	0000EST			

MAZ002>024 Western Franklin - Eastern Franklin - Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Western Hampshire - Western Hampden - Eastern Hampshire - Eastern Hampden - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket

09	0800EST 2200EST	0	0	Strong Winds
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MAZ016	Eastern Norfolk			
09	1401EST	0	0	High Wind (G64)

Worcester County					
Fitchburg	09	1600EST	0	0	Flood

Hampden County					
West Brimfield	09	1900EST	0	0	Flood

MAZ005-005-012	Western Middlesex - Southern Worcester					
	09 13	2000EST 0500EST	0	0	300K	Flood

Bristol County					
Norton	10	0100EST	0	0	Flood



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MASSACHUSETTS, Central and East

Hampshire County

Gibbs Crossing

10 0500EST 0 0 Flood

A powerful storm system moving very slowly from the Ohio Valley to the eastern Great Lakes caused strong winds and heavy rainfall to Massachusetts, resulting in urban street flooding, basement flooding, small stream flooding, and main stem river flooding. At times, the rainfall was torrential, especially during thunderstorms during the evening on March 9th. Rainfall totals of 2 to 4 inches were the most common, but totals exceeding 4 inches did occur in all areas of the state. Most of the rainfall occurred during a 30-hour period resulting in considerable urban street flooding. Many roads had to be closed for periods ranging from a few hours up to 12 to 24 hours.

Some of the maximum storm total rainfall amounts included: Oxford, 5.44 "; Ware, 4.90"; Brimfield, 4.40"; Wales, 4.10"; Worcester Airport, 4.06"; Holland, 4.03"; Onset and West Bridgewater, 4.00"; Wilbraham, 3.80"; Mansfield, 3.74"; and Hampden, 3.70". Record daily rainfalls for March 9th were recorded at Boston and Worcester, with amounts of 2.14" and 3.73", respectively.

Strong south winds gusted to 74 mph atop Blue Hill Observatory in Milton at 2 PM on March 9th and much of the central and eastern part experienced strong south-southeast to south winds with gusts from 40 to 55 mph after the passage of a warm front during the mid to late morning hours. The Blackstone River at Northbridge reached flood stage of 9 feet at 8 PM on March 9th and crested at 10.7 feet at 5 AM on March 10th, then fell below flood stage at 3:30 PM.. Hardest hit towns were the Blackstone Valley communities of Northbridge and Uxbridge. One official termed it "the worst flooding in 20 years." Numerous houses had flooded basements and at least six houses had serious flooding. The Nashua River at East Pepperell reached flood stage of 8 feet at 11 AM on March 10th and crested at 9.7 feet at 11 PM on March 11th, then fell below flood stage at 5 AM on March 13th. The Assabet River at Maynard reached a crest of 5.6 feet at 7 AM on March 11th; flood stage is 5 feet. The Merrimack River at Lowell reached a crest of 51.2 feet at 10 PM on March 11th, just below flood stage of 52 feet.

Several small streams reached flood stage in central and western Massachusetts. The Ware River at Gibbs Crossing in Hampshire County reached flood stage of 7 feet at 5 AM on March 10th. The Quaboug River at West Brimfield in Hampden County reached flood stage of 6.5 feet at 7 PM on March 9th. The North Nashua River at Fitchburg reached flood stage of 6.5 feet at 4 PM on March 9th. The Wading River in Norton (Bristol County) reached flood stage of 9 feet at 1 AM on March 10th.

MAZ005

Western Middlesex

12 1245EST 2 0 Snow Squall

A fast moving snow squall suddenly dropped visibility to near zero on Interstate Route 495 in Boxborough and resulted in a pile-up of 30 to 35 vehicles and the deaths of two people. A 45-year-old man and a 3-month-old infant died. Motorists were blinded by the snow. A thin coating of ice which quickly formed on the road surface contributed to the multiple vehicle crashes. The highway was closed for about 3 hours and traffic was stalled for 7 miles. Another similar heavy snow squall occurred in Windham and Derry in southeast New Hampshire, which resulted in multiple crashes on Interstate Route 93 and the closure of that highway. Massive traffic tie-ups affected commuters and motorists from Massachusetts on that interstate highway throughout the afternoon. ??VE, M45VE

MAZ009

Western Hampden

14 0600EST 0 0 Heavy Snow
1800EST

Snowfall totaled 6.0 inches in Granville. This was an elevation snowfall event, with less snowfall at lower elevations. Numerous,



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MASSACHUSETTS, Central and East

mostly minor, skidding accidents were reported on highways in western Massachusetts									
MAZ022	Barnstable								
	18	1800EST			0	0			Heavy Rain
	19	2100EST							
More than 2 inches of rain fell in several towns on Cape Cod. Some storm totals included: South Orleans, 2.50"; Chatham and West Yarmouth, 2.20".									
MAZ005>007-013>024	Western Middlesex - Western Essex - Eastern Essex - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket								
	21	0600EST			0	0			Strong Winds
	22	0700EST							
MAZ016	Eastern Norfolk								
	22	0255EST			0	0			High Wind (G52)
MAZ008	Western Hampshire								
	22	0700EST			0	0			Heavy Snow
A strong very early Spring nor'easter was caused by a low pressure system which moved to the north-northeast from the Virginia coast on March 21st, passing to the southeast of Cape Cod on March 22nd. This storm brought a mixture of snow, sleet, and rain, as well as strong northeast winds. The maximum snowfall reported was 6.1 inches in Worthington in Hampshire County in western Massachusetts. Snowfall totals of 3 to 5 inches occurred elsewhere, except in Plymouth and Bristol Counties, where amounts were on the order of an inch or two. Cape Cod and the Islands had rain. Strong northeast winds gusting to 40 to 55 mph affected east and southeast coastal Massachusetts for about 24 hours from the morning of March 21st through the morning of March 22nd. Some peak wind gusts included: Blue Hill Observatory, Milton, 60 mph; Winthrop, 51 mph; Falmouth, 48 mph; Martha's Vineyard, 46 mph; Chatham and Provincetown, 41 mph; and Nantucket, 39 mph. Offshore, the Buzzards Bay buoy reported a peak wind of 55 mph. Twenty-foot seas were reported offshore and the high seas frustrated efforts by the Coast Guard to tow a disabled fishing vessel off Provincetown. However, all turned out well as the vessel was able to ride out the high seas.									
MAZ005>007-013>024	Western Middlesex - Western Essex - Eastern Essex - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket								
	26	1000EST			0	0			Strong Winds
		1800EST							
Strong south-southwest winds gusting to 35 to 50 mph occurred from late morning until late afternoon. Some peak wind gusts included: Blue Hill Observatory, Milton, 50 mph; Boston and Falmouth, 36 mph.									
MAZ015>016	Suffolk - Eastern Norfolk								
	27	1528EST			0	0			Record Warmth
		1530EST							
MAZ012-015>016	Southern Worcester - Suffolk - Eastern Norfolk								
	28	1306EST			0	0			Record Warmth
		1400EST							
Record warmth for the month of March occurred across most of the state. On March 27th, the temperature at Logan International Airport in Boston soared to 79 degrees, breaking the record for the date. The old record was 76 degrees in 1945. At Blue Hill Observatory in Milton on the 27th, the high temperature of 78 degrees surpassed the previous record for the date of 76 degrees in 1945. At Blue Hill Observatory on March 28th, the temperature soared to 86 degrees, establishing a new high temperature record for the month of March. The previous record there was 85 degrees set on March 29, 1945. At Boston on March 28th, the high temperature reached 85 degrees and the old record was 81 degrees in 1989. At Worcester Airport, on March 28th, the high temperature of 81 degrees tied the record high reading for the date.									



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Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Crops	Character of Storm
					Killed	Injured	Property		

MASSACHUSETTS, Central and East

MAZ003-010 Eastern Franklin - Eastern Hampshire

30	0700EST	0	0	Flood
31	2359EST			

Record warm temperatures produced rapid snow melt across northern New England and the combined effects of rapid runoff and dam releases caused the Connecticut River to rise. Flood stage of 112 feet was attained at 7 AM on March 30th in Northampton and flood stage of 28 feet was reached at 10:30 AM at Montague. The river remained above flood stage into the beginning of April.....see April Storm Data for further information. Flood-prone areas outside of levee protection were affected.

MAZ012-015>016 Southern Worcester - Suffolk - Eastern Norfolk

31	1342EST	0	0	Record Warmth
	1353EST			

On March 31st, the temperature at Logan International Airport in Boston soared to an all-time record for the month of March when a high temperature of 89 degrees was recorded. The previous high reading was 86 degrees on March 29, 1945. At the Worcester Airport, the high temperature of 84 degrees tied the warmest temperature ever recorded in the month of March...again on March 29, 1945. However, the daily high temperature record for March 31st in Worcester was shattered by a wide margin--the previous record was only 70 degrees set on March 31, 1918. At the Blue Hill Observatory in Milton, the high temperature reached 89 degrees, breaking the all-time high temperature record for the month, which had just been set on March 28th of this year at 86 degrees. It also broke the high temperature record for the date of March 31st, which was only 69 degrees recorded in 1986. Also, at many weather stations, the high temperatures on March 31st were the highest readings ever observed so early in the season

NEW HAMPSHIRE, Southern

NHZ012 Hillsborough

08	1900EST	0	0	Heavy Rain
09	0000EST			

NHZ012 Hillsborough

10	0700EST	0	0	Flood
13	1200EST			

A powerful storm system moving slowly northeast from the Ohio Valley to the eastern Great Lakes brought strong winds and heavy rainfall to New Hampshire, resulting in urban street flooding, basement flooding, and some minor river flooding. The Piscataquog River at Goffstown reached flood stage of 9 feet at 7 AM on March 10th and crested at 9.1 feet at 10:30 AM on the 10th, then fell back below flood stage at noon on March 13th. Rainfall totals generally were in the 2 to 3 inch range. Some totals included: Hollis, 3.10"; Nashua, 2.72"; Manchester, 2.48"; and Weare, 2.31".

NHZ011 Cheshire

22	0000EST	0	0	Heavy Snow
	1000EST			

A strong early Spring nor'easter was caused by a low pressure system which moved to the north-northeast from the Virginia coast on March 21st passing to the southeast of Cape Cod on March 22nd. This storm brought 3 to 5 inches of snow to southern New Hampshire. However, heavy snow was reported across northern Cheshire County, with totals of 6 to 8 inches in that area.



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RHODE ISLAND

RIZ001>007 Northwest Providence - Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport

08	1700EST	0	0						Heavy Rain
09	2300EST								

RIZ001>007 Northwest Providence - Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport

09	0800EST	0	0						Strong Winds
	1800EST								

Kent County
West Warwick

09	1900EST	0	0	50K					Lightning
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RIZ001

Northwest Providence

10	1800EST	0	0						Flood
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A powerful storm system moving slowly toward the northeast from the Ohio Valley to the eastern Great Lakes brought strong winds and heavy rainfall to Rhode Island, resulting in urban street flooding, basement flooding, and river flooding. The Blackstone River at Woonsocket crested at 10.3 feet on March 10th at 6:00 PM; flood stage is 9.0 feet. Urban flood control systems prevented any flooding in the city. Several parking lots were reported flooded with up to 3 feet of water along the Blackstone River in Cumberland. At times the rainfall was torrential, especially in thunderstorms during the evening on March 9th.

In West Warwick, a bolt of lightning struck a garage and the resulting fire spread to the nearby house. Damage was reported at \$50,000. Two other lightning strikes did minor damage in Providence and Cumberland.

Rainfall totals of 2 to 4 inches were reported across the state, most of it falling in about 30 hours. A record daily rainfall total of 3.02" was set on March 9th at Providence. Some of the maximum totals across the state included: Coventry, 4.05"; Clayville, 3.90"; Johnston, Providence, and Cranston, 3.60"; Woonsocket, 3.43"; Warwick, T.F. Green Airport, and East Providence, 3.41"; West Warwick, 3.40"; and Hopkinton and Cumberland, 3.30". The rest of the state had between 2 and 3 inches. Urban street flooding was quite serious in many places. Many roads had to be closed due to flooding for periods varying from a few hours up to 12 to 24 hours. Flood-prone properties also reported flooding problems.

Strong south winds gusting to 40 to 55 mph occurred after the passage of a warm front during the morning hours. The strong winds caused scattered power outages. A peak wind gust to 54 mph was reported at Tiverton. Siding was reported ripped off a vacant building in North Providence.

RIZ001>007 Northwest Providence - Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport

12	1400EST	0	0						Strong Winds
	1500EST								

Strong west to northwest winds in the wake of an Arctic cold front gusted to near 50 mph. Some peak gusts included: Tiverton, 52 mph; Newport, 50 mph; and Providence, 48 mph.

RIZ002>007

Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport

21	0600EST	0	0						Strong Winds
22	0800EST								

A strong very early Spring nor'easter was caused by a low pressure system which moved to the north-northeast from the Virginia coast on March 21st passing to the southeast of Cape Cod on March 22nd. This storm brought a mixture of snow, sleet, and rain to Rhode Island. Over the northern half of the state, snow accumulation was from 2 to 4.5 inches. Strong northeast winds gusting from 35 to 50 mph occurred over the central and southern portion of the state. The strong winds occurred during a 24-hour period from the morning of March 21st into the morning of March 22nd. A peak wind gust to 49 mph was reported from Block Island, while Providence had a gust to 35 mph.



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					Killed	Injured	Property	Crops	

RHODE ISLAND

RIZ002>006 Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington

26 1000EST 0 0 **Strong Winds**
1800EST

Strong south-southwest winds gusting to 35 to 50 mph occurred across central and southern portions of the state. A peak gust to 35 mph was recorded at Providence.

RIZ004 Eastern Kent
27 1434EST 0 0 **Record Warmth**

RIZ004 Eastern Kent
28 1140EST 0 0 **Record Warmth**

RIZ004 Eastern Kent
31 1350EST 0 0 **Record Warmth**

On March 27th, the high temperature at T.F. Green Airport in Warwick reached 81 degrees, breaking the old record for the date of 77 degrees set in 1945.

On March 28th, the temperature rocketed to 81 degrees at 11:40 AM, breaking the old record for the date set in 1989. The high temperature for the day was 83 degrees, thereby establishing the new record high temperature for March 28th.

On March 31st, the temperature at T.F. Green Airport in Warwick reached 85 degrees at 1:50 PM, breaking the previous record for the date of 75 degrees set in 1981. The warmest temperature ever recorded in the month of March is 90 degrees on March 29, 1945, however.